

Playing with Science and Technology

Chamber of Eco Commerce (CEC) aims to turn Classrooms into Science Labs across USA



August 26, 2014, Alpharetta, GA (CEC) --- Chamber of Eco Commerce (CEC) and Eco Commerce Exchange (ECE) stakeholders are revolutionizing the learning of Science, aiming to increase the number of children choosing [STEM path](#).

At schools across the USA, new technology can revolutionize the teaching of science. The CEC's new STEM initiative 2014-17, **'Turning Classrooms into Science Labs throughout the USA'**, aims to increase the number of students choosing a scientific career path by playing with technology and science.

A school class is playing soccer. It is not a physical education lesson, but a physics one. The ball is equipped with sensors that record the power of the kick. Which of the students is going to win the power competition? And what about potential brain injury? The computer will be the judge. As a matter of fact, at the end of the match, data is sent to a computer, and compares the information in graphic form. In this new and exciting way, children will have learnt about the theory of strength in physics.

In another classroom, a teacher and students are wearing special gloves pairs of glasses. With these aids, they are lifting 'virtual' objects. It's a geometry class in 3-D.

In a class next door, fifteen year-old students are remotely operating a robotic telescope through the Internet. They are preparing to take pictures of Saturn, which will be taken that night. Tomorrow they will be able to measure the planet's diameter.

And in another classroom, students are monitoring water quality in nearby rivers and lakes, through a web-based real-time water quality management system, while learning about chemistry and providing valuable service for their community about local water quality.

In another classroom, students are learning about energy, by designing their classroom to a more energy efficient environment through latest technologies.

In EdibleLab classrooms, students are learning about bio economy, by tasting vegetables and fruits grown in their own school garden, and learning about food safety and related technologies.

And finally, in another classrooms, students are learning about Human Technology, by testing and implementing the latest virtual education solutions, apps, and tools, creating smarter learning environments in their schools and communities.

In this way, through direct experience which makes sciences more appealing to the young, the science educators can motivate students more to choose a scientific path in their future career.

Nowadays, scientific universities and institutions have shortage of students. The threat for USA then is the probable lack of scientists and, consequently, a stall in R&D. "We need more scientists and technologists in USA, and we need to produce them. The educational systems of the different states throughout the USA have to produce them. Innovations and projects like 'Turning your classroom into a Science Lab' can help.

"We are piloting new technology and teaching styles to help science educators motivate K-12 students, as this age group has very high interest in science. Our program is also targeting students at the age where their interest can go down", explains Minna LeVine, CEO, Chamber of Eco Commerce (CEC).

Aware of many challenges of K-12 science education, the CEC is supporting the integration of new technologies and playing with science into teaching. Applications include portable technologies, augmented and virtual reality tools, as well as robotic and smart devices. Rapid advances in educational technologies enable new learning environments using simulations, visualization, immersive environments, game playing, and distance learning.

The pedagogical rationale behind 'Turning Classrooms into Science Labs', is one of social constructivist theories of learning. They conceive of an education program that is more closely related to real life conditions and the social world in which students live.

Today, technologies are already being used in different classrooms. 'Turning Classrooms into Science Labs' could be one step towards the renovation of the science educational programs in the USA. The CEC will continue to work with Corporate Sponsors, Foundations, and Science Teachers to motivate students and help educators improve the learning of STEM in classrooms, and improve the quality and quantity of scientific research in the USA for years to come.

Please visit [Eco Commerce Exchange \(ECE\)](#) to learn more about how you can help us 'Turn Classrooms into Science Labs' throughout the USA.

